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ABSTRACT

This evaluation study assessed the effectiveness of an Emergency School Aid Act (ESAA) funded Secondary Reading Project (SRP) in aiding secondary students to overcome a lack of developmental skills in reading. General procedures and specific techniques used in the evaluation are outlined and discussed. During the 1973-74 school year ESAA-funded SRP served students in twelve targeted high schools, while Dallas Independent School District (DISD) funded SRP served six nontargeted high schools. Included among the results were data indicating that (a) the most successful schools had numerous paraprofessionals and volunteer tutors, thus reducing the student-adult ratio; (b) the lower the pretest achievement level, the higher the mean gain. (Author)

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EVALUATION OF AN ESAA SECONDARY READING PROJECT

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An evaluation study was conducted to assess the effectiveness of an Emergency School Aid Act (ESAA) funded Secondary Reading Project (SRP) in aiding secondary students to overcome a lack of developmental skills in reading. This paper summarizes information obtained in that evaluation. More specifically, the objectives of this paper are (a) to present an overview for SRP as it was implemented and conducted in the Dallas Independent School District (DISD), (b) to discuss the evaluation model used to evaluate SRP, and (c) to present major results revealed in the evaluation of SRP.

Project Overview

The DISD is committed to provide special reading services to all students of all ethnic backgrounds to help them achieve their reading potential. Prior to 1973, many students, particularly minority students, fell far below the national norms in reading achievement. The Secondary Reading Project (SRP) was founded on the belief that every secondary student should be given every opportunity to develop to his potential. Thus, the project was organized to provide for the planning, developing, implementing, and evaluating of a continuous program of reading instruction for certain secondary students who perform below the level of functional literacy. Stated goals included an improved self-concept and a one month increase in reading achievement for each month of instruction.

During the 1973-74 school year, SRP served students in twelve targeted high schools, six nontargeted high schools, and twenty-three junior high

schools. Table 1 presents a list of the SRP schools with the number of full-time reading teachers per building. In addition to these full-time reading teachers, students in the twelve targeted high schools had the teamwork services of a teacher aide, a tutor, and a school volunteer in each classroom. Each senior high school received $1,000 per reading teacher for the purchase of supplies and materials, while junior high schools received $500 per reading teacher.

SRP had four components: Special Remedial Services, Curriculum Development, Administration, and Evaluation. Special Remedial Services included three subcomponents: Instructional, Staff Training, and Community Affairs. The primary goal of the Instructional subcomponent was to aid secondary students of all backgrounds in overcoming a lack of developmental skills in reading. Individualization of learning and teaching was a primary concern, and all reading materials were adopted for personalized learning.

The Staff Training subcomponent provided special training for secondary principals, leadership staff, and classroom reading teachers to implement reading instruction appropriate to the individual needs and abilities of students from diverse socioeconomic backgrounds. The overall objective of this subcomponent was to develop a cadre of personnel highly trained in implementing multilevel, multiethnic, and multisensory reading programs.

The Community Affairs subcomponent was designed to complement the objective in reading. Significant efforts were made to inform and involve the home and community in the school program in order to help students achieve their maximum potential. Specifically, two home-school liaisons

Table 1

SRP Schools and Number of Full-Time Reading Teachers per Building

Targeted High Schools			
Bryan Adams	5	Franklin D. Roosevelt	7
W. H. Adamson	3	W. W. Samuell	3
Hillcrest	3	South Oak Cliff	7
Lincoln	7	H. Grady Spruce	5
North Dallas	7	W. T. White	3
L. G. Pinkston	7	Woodrow Wilson	3
Nontargeted High Schools			
David W. Carter	2	Seagoville	1
Thomas Jefferson	2	Skyline	2
Justin F. Kimball	2	Sunset	2
Junior High Schools			
W. H. Atwell	1	D. A. Hulcy Middle	1
T. W. Browne	1	J. L. Long	1
E. H. Cary	1	Thomas C. Marsh	1
E. B. Comstock	1	T. J. Rusk	1
Thomas A. Edison	1	Rylie Middle	1
Fred F. Florence	1	Sequoyah Middle	1
Benjamin Franklin	1	Alex W. Spence	1
W. H. Gaston	1	L. V. Stockard	1
W. E. Greiner	1	Boude Storey	1
Robert T. Hill	1	E. D. Walker Middle	1
O. W. Holmes	1	Sarah Zumwalt	1
John B. Hood	1		

were assigned to each targeted high school. They worked in the community attempting to get all students to school and then to keep them there.

The major functions of the Curriculum Development component were to write and implement a sequential 7-12 curriculum which would provide a balanced course of study by incorporating a range of peoples and cultures.

The Administration component provided office and support staff to assist attainment of project objectives in a cost-effective manner. The component provided technical assistance to project personnel in the planning, implementation, and general management of the project.

The objectives of the Evaluation component were to delineate, obtain, and provide useful descriptive and formative feedback for process decision-making. Additionally, this component provided end-of-year summative information for determining the degree to which program operation conformed to program design and the extent to which components met their stated objectives.

Theoretical Framework

Evaluation of SRP was rather loosely based upon Stufflebeam's Context-Input-Process-Product (CIPP) evaluation model. All types of evaluation were addressed in the SRP evaluation; however, process evaluation was emphasized during the first year of implementation. General steps in the evaluation of SRP are outlined below:

1. The evaluator worked with project management to formulate evaluation questions.
2. The project director examined and reacted to the evaluation plan.
3. Students were pretested on affective and cognitive variables.
4. Process evaluation activities were conducted and culminated in twenty Interim reports. This step also involved much interaction between the evaluator and the project staff concerning findings from the process evaluation.

5. Context and input evaluation activities were conducted as needed and/or as time allowed.

6. Students were posttested on affective and cognitive variables.

7. Product evaluation information for determining the degree to which program operation conformed to program design and the extent to which components met their stated objectives was summarized and presented in a final report.

8. The final report was used by the project manager as a basis to formulate recommendations for the next cycle of the project. These recommendations were presented to the local school board.

These steps outline the basic framework of this evaluation; however, they do not convey the dynamic scramble in arriving at the final report for the school board. A brief description of this evaluation should illustrate what is probably a general pattern for evaluations of many first year, federally funded projects.

The evaluator arrived on site during June. Planning for project implementation had been completed and a month-long summer workshop was underway. A tentative evaluation plan was required immediately. Since a pretest-posttest design was chosen, an instrument needed to be selected and ordered. Concurrently, descriptive and definitive information had to be acquired in efforts to conceptualize the project as an integrated system. Also during the same first months, considerable effort was devoted to monitoring-process-formative activities to enhance the probability of a quick startup and eliminate the possibility of evaluating a nonexistent project. Since more time was available after the pretest administration, the evaluation plan was then finalized, specified evaluation activities were implemented, and planning for the next year's evaluation was initiated.

Methods and/or Techniques

In effecting this evaluation, the following methods and techniques were used:

1. Interaction and Service--the impact of this evaluation was affected by the degree of credibility that the evaluator had with the project staff. It was found that the evaluator's credibility was enhanced by frequent interaction with project staff. As interim or process evaluation reports were written, they were summarized at project staff meetings. Additionally, the evaluator's credibility was increased to the degree that a service could be provided. To provide a service the evaluation design must have enough flexibility to occasionally obtain idiosyncratic information.

2. Observation--considerable effort was expended upon classroom observation during the initial implementation phase. This monitoring was deemed necessary so that startup delays might be minimized. Additional classroom observations were made throughout the year to determine the kinds of materials and the degree of individualization used in SRP classrooms.

3. Surveys--several paper and pencil surveys were used to determine information which could be used as guides to areas where more depth information might be useful. As an example, content area teachers were surveyed to determine their awareness of SRP and the services available from SRP.

4. Interviews--personal interviews were conducted in cases where a less structured form of response was likely to reveal valuable information concerning bottlenecks in paperwork, personnel problems, or constructive suggestions.

5. Testing--pretests and posttests were administered in the effective and cognitive domains. Pretest results were used in a process evaluation report to pinpoint inequities in the assignment of staff to particular buildings. Posttest results were utilized in the final product evaluation.

6. Systems Analysis--limited systems analysis techniques were used in attempts to determine if bottlenecks existed, if replication of effort occurred, and if project components interfaced effectively.

7. Statistical Analysis--statistical analyses were used with affective and cognitive data in the product evaluation.

Data Source

This evaluation used a small sample (approximately 10%) of SRP students with Comprehensive Tests of Basic Skills (CTBS) total reading scores. The stipulation placed on this stratified random sample was that students had to have complete data which consisted of sixth-, seventh-, and eighth-grade scores. All students with pretest and posttest scores on the Gates-MacGinitie

Reading Tests (GMRT) were included for analysis. Affective measures were administered to each teacher's first period class. In addition, pretest-posttest affective measures were taken for one class of each of 10 randomly selected teachers.

All SRP teachers and resource teachers were asked to respond to several surveys, and were also observed with the aid of a behavioral checklist. A nonstructured interview was conducted with a sample of principals. A ten percent stratified-random sample of parents was surveyed via U.S. Mail. In addition, administrators, content area teachers, and community members were surveyed or interviewed concerning their awareness of the ESAA reading project.

Evaluation Design

The evaluation design used for the CTBS total reading scores consisted of the following repeated measures paradigm:

$$O_1 \quad X_T \quad O_2 \quad X_T \quad O_3 \quad X_{SRP} \quad O_4$$

The observations (O_1, O_2, O_3) consisted of the CTBS total reading scores; from a student's sixth-, seventh-, and eighth-grade years; O_4 was the CTBS total reading score achieved during the 1973-74 school year; X_T was the traditional English class, and X_{SRP} was the SRP reading class.

The design used for evaluation of the GMRT data consisted of a two-group, pretest-posttest design which is schematically represented as:

$$O_1 \quad X_1 \quad O_2$$
$$O_1 \quad X_2 \quad O_2$$

The observations (O_1, O_2) consisted of pretest and posttest data, respectively; X_1 represents the ESAA-SRP treatment in targeted high schools, and X_2 represents the DISD-SRP treatment in nontargeted high schools. The regression analysis

approach was employed for the GMRT component of this analysis. Within the regression analysis framework, the GMRT posttest served as the criterion variable, with the GMRT pretest serving as a covariate. Predictor variables such as project type, student sex, and student ethnicity were used to categorize the data to test hypotheses on their effectiveness in accounting for pupil achievement.

The design used for evaluation of affective data included the following two-group posttest paradigm:

$$X_1 \quad O_2$$

$$X_2 \quad O_2$$

The observations (O_2) consisted of posttest measures; X_1 and X_2 represent different subgroups of the population, such as targeted-nontargeted or male-female.

In addition, a pretest-posttest paradigm similar to that used with the cognitive data was used to obtain affective data for a small sample of SRP students.

The major evaluation questions of interest are delineated by component below:

A. Secondary Reading Department

1. Did achievement results vary among the SRP schools?

2. Did SRP students at different achievement levels on the pretest exhibit differential gains in reading achievement at the end of the year?

3. Did students in SRP targeted high schools perform on a selected standardized measure of reading achievement at a level equivalent to a sample of students in nontargeted high schools?

4. How did student reading achievement gains under SRP compare to past student reading achievement gains without SRP in targeted high schools?

5. Was reading achievement affected by student-adult ratio?

6. How did targeted SRP, nontargeted SRP, and nonSRP English students compare in terms of attitude-toward-self, attitude-toward-school, and attitude-toward reading?

7. How did students perceive the assistance they received from SRP classes?

B. Staff Training

8. What was the perceived effect of preservice and inservice staff development workshops?

C. Community Affairs

9. What was the role of the home-school liaison?

10. Were stated objectives for the home-school liaisons achieved?

11. How many volunteer parents or volunteer tutors worked in SRP classes?

D. Curriculum Development

12. What efforts were made in the area of Curriculum Development?

13. How did teachers react to the Multiethnic Studies Program (MSP) material?

E. Administration

14. Was assistance supplied to other project components when requested?

15. Were ESAA Advisory Committee members assisted in performing their role?

Evaluation Results:

A. Secondary Reading Department

1. SRP was actually 12 different projects, although in many cases only slight modifications were evidenced. During the eight month pretest-posttest interval, different results were achieved at each site; the more successful projects attained mean grade score gains in vocabulary achievement of 1.34, 1.19, 0.79, and 0.63. The common thread for these schools seems to be relatively low student-adult ratio.

2. Overall, students at different pretest achievement levels exhibited differential gains in achievement for both vocabulary

and comprehension. As revealed in Table 2, an inverse relationship seems to exist; that the lower the pretest achievement level, the higher the mean gain for that group.

Table 2

GMRT Pretest Achievement Level	Mean Vocabulary Gain in Grade Score*	N	Mean Comprehension Gain in Grade Score*	N
1.1-1.9	1.10	164	1.25	173
2.0-2.9	0.62	354	0.84	330
3.0-3.9	0.68	496	0.69	501
4.0-4.9	0.62	560	0.45	576
5.0-5.9	0.37	797	0.31	915

*Gains were achieved during an eight month interval.

3. Students in the targeted schools started (pretest) and ended (posttest) at a lower reading achievement level, than the non-targeted students; however, the targeted students showed a larger gain in reading achievement. No statistical differences were noted between means for students in targeted and nontargeted schools on either the GMRT vocabulary or comprehension subtests, when the entry achievement level (pretest score) was used as a covariate. A summary of the results is displayed in Table 3:

Table 3

Subtest			GMRT Pretest Mean	GMRT Posttest Mean
Vocabulary	Targeted	1922	34.2	37.8
	Nontargeted	421	37.5	40.4
Comprehension	Targeted	2155	31.5	34.9
	Nontargeted	496	34.6	36.9

4. A stated objective for SRP was worded as follows: "Students will gain one month in achievement for each month in the program." This objective was not attained in SRP; as one-third of the students exhibited a gain of 8 months or more in achievement

during 8 months' instruction. Another way of examining the data in terms of months of instruction was to compare the grand mean pretest and posttest scores. Such a comparison reveals a mean increase of 7 months' achievement in vocabulary for 8 months' instruction and 5 months' achievement in comprehension for 8 months' instruction.

5. Historical or longitudinal CTBS data for a small sample (10%) of students revealed a linear trend in achievement across time. That is, the information indicated that, overall, students gained at the same rate in past years as they did during the 1973-74 school year. There were, of course, several programs that demonstrated dramatic gains.

6. There seemed to be some indication that small student-adult ratios had a positive, enhancing affect upon achievement gains; however, the relationship did not hold without exception across all schools. Large gains were evident in the schools with numerous volunteers, where the students-adult ratios were greatly reduced.

7. Attitude-toward-self, attitude-toward-school, and attitude-toward-reading were investigated with a battery of affective surveys. Significant differences were found among mean scores for targeted SRP students, nontargeted SRP students, and nonSRP English students. NonSRP English students attained the highest mean score in each case; however, the differences were not large enough to reflect any great practical significance. In addition, pre-post analyses revealed no significant effect of the project on attitudes.

8. During classroom observations, most students appeared satisfied with the assigned work. Many of the students apparently felt that the materials and assistance were of value.

B. Staff Training

9. Teachers seemed to feel that the summer workshops were useful. However, inferences from other information presented in this report plus anecdotal information from conversations indicated that the in-service programs presented during the year were, in general, not well received. For future workshops, reading teachers requested allocation of time for "hands-on" experience with new materials and equipment. They also wanted organized sessions in which knowledgeable persons illustrate the advantages and disadvantages of particular programs, equipment, and techniques.

C. Community Affairs

10. The role of the home-school liaison included helping to interpret the reading program to parents and the community, establishing appropriate two-way communications between home and school, and working with students to encourage regular school attendance.

11. Home-school liaisons met predetermined evaluative criteria for two of eight stated objectives. However, they were close to meeting the evaluative criteria on two of the remaining objectives. Two of the objectives with related evaluative data are displayed in Table 4.

Table 4

Objective	Evaluative Data	Objective Attained
The home-school liaison attends games, PTA programs, and other school functions.	90% of resource teachers indicated that such activities were attended.	Yes
The home-school liaison team visits the homes of all students in SRP at least once.	19% of the parents surveyed indicated they were visited.	No

12. The distribution of volunteer parents among the targeted high schools was extremely disproportionate. There was a range of 0 to 81: two schools had a large number of volunteers (54 and 81); five schools had between 2 and 9; five schools did not report having any volunteers.

D. Curriculum Component

13. Curriculum writers are in the process of writing and implementing a sequential 7-12 curriculum for the 1974-75 school year with the stated goal of providing a balanced social science curriculum which incorporates a range of peoples and cultures.

14. Responses among Multiethnic Studies Program (MSP) teachers indicated positive attitudes toward the program.

E. Administration

15. The Administration Component was judged by all project managers to supply needed assistance when requested.

16. All committee members indicated that ESAA project managers were assisting them to fulfill their role.

Educational Importance of the Study

Information was obtained concerning the organization of and results

attributed to a large secondary reading project. Similar secondary reading projects may be interested in using this information to build upon, thus enabling them to bypass time-sapping, organizational and instructional problems. Thie evaluation might be used as a starting point for future evaluations of secondary reading projects. In addition, evaluators can use the data presented for general comparisons.